

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2019/0167902 A1 Kamen et al.

Jun. 6, 2019 (43) **Pub. Date:**

(54) DEVICES, METHODS AND SYSTEMS FOR WIRELESS CONTROL OF MEDICAL **DEVICES**

(71) Applicant: **DEKA Products Limited Partnership**, Manchester, NH (US)

(72) Inventors: Dean Kamen, Bedford, NH (US); Gregory R. Lanier, JR., Merrimack, NH (US); Gregg W. Rivinius, Bedford,

(21) Appl. No.: 16/266,613

(22) Filed: Feb. 4, 2019

Related U.S. Application Data

- (63) Continuation of application No. 14/173,359, filed on Feb. 5, 2014, now Pat. No. 10,195,343, which is a continuation-in-part of application No. 14/236,381, filed on Jan. 31, 2014, now Pat. No. 10,238,794, filed as application No. PCT/US12/71280 on Dec. 21, 2012, which is a continuation-in-part of application No. 13/322,896, filed on Dec. 16, 2011, now abandoned, said application No. 14/173,359 is a continuation-in-part of application No. 13/322,896, filed on Dec. 16, 2011, now abandoned, which is a continuation-in-part of application No. 13/021,000, filed on Feb. 4, 2011, now Pat. No. 9,750,896.
- (60) Provisional application No. 61/760,988, filed on Feb. 5, 2013, provisional application No. 61/842,687, filed

on Jul. 3, 2013, provisional application No. 61/301, 957, filed on Feb. 5, 2010.

Publication Classification

(51) Int. Cl. (2006.01)A61M 5/172 A61B 5/145 (2006.01)A61B 5/00 (2006.01)A61M 5/142 (2006.01)G16H 10/65 (2006.01)

U.S. Cl.

CPC A61M 5/1723 (2013.01); A61B 5/14532 (2013.01); A61B 5/742 (2013.01); A61M 5/14244 (2013.01); A61M 2005/1402 (2013.01); G16H 10/65 (2018.01); A61M 2230/201 (2013.01); A61M 2005/14264 (2013.01); A61M 5/14248 (2013.01)

(57)ABSTRACT

A medical device system. The system includes a first medical device, a first remote interface, and a second remote interface in communication with the first remote interface and the first medical device, wherein the first medical device sends a command to the first medical device through the second remote interface, and wherein when the second remote interface receives the command, the command must be confirmed by the second remote interface before the command is send by the second remote interface to the first medical device.



